

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 through 45. (Cancelled)

46. (New) A multichamber coverslip comprising a group of connected coverslips which are spaced such that a single coverslip lines up with one or more slides in a slide holder of a system for processing biological samples.

47. (New) The multichamber coverslip of claim 46, wherein an individual coverslip comprises a concave well.

48. (New) The multichamber coverslip of claim 46, further comprising glass.

49. (New) The multichamber coverslip of claim 46, further comprising plastic.

50. (New) The multichamber coverslip of claim 47, wherein an individual coverslip with a concave well is an incubation chamber.

51. (New) The multichamber coverslip of claim 47, wherein the concave well comprises a soft and pliable top.

52. (New) The multichamber coverslip of claim 51, wherein the soft, pliable top allows expansion and contraction.

53. (New) The multichamber coverslip of claim 50 wherein the incubation chamber

comprises a volume between 10 and 20 μ l.

54. (New) The multichamber coverslip of claim 46, wherein an individual coverslip is prescored.

55. (New) The multichamber coverslip of claim 52, wherein the prescored coverslip can be snapped off the holder.

56. (New) The multichamber coverslip of claim 46, further comprising reagents dried thereupon.

57. (New) The multichamber coverslip of claim 46, wherein each individual coverslip is labeled.

58. (New) The multichamber coverslip of claim 57, wherein the label is a barcode.

59. (New) A method of performing an assay on a biological sample comprising, placing a microscope slide having a biological sample into a slide holder of an integrated system for processing the biological samples, wherein the system further comprises a multichamber coverslip comprising a group of individual coverslips which are connected and spaced such that a single coverslip is lined up over the sample on a slide.

60. (New) The method of claim 59, wherein a solution for an assay is applied to the system.

61. (New) The method of claim 60, wherein solution is water and each coverslip further comprises a reagent predried onto the coverslip.

62. (New) The method of claim 59, wherein the assay is an immunocytochemical assay.
63. (New) The method of claim 59, wherein the assay is an in situ hybridization assay.
64. (New) The method of claim 59, wherein the assay is a polymerase chain reaction in situ hybridization assay.
65. (New) The method of claim 59 wherein the biological sample is selected from the group consisting of a tissue section, a biopsy tissue, a cell smear, a nucleic acid, a protein or peptide, a chromosome, and a bodily fluid.
66. (New) The method of claim 59, wherein the biological sample to be assayed further comprises a control sample.